

State of Alaska Cyber Security & Critical Infrastructure Cyber Advisory

June 22, 2015

The following cyber advisory was issued by the State of Alaska and was intended for State government entities. The information may or may not be applicable to the general public and accordingly, the State does not warrant its use for any specific purposes.

ADVISORY NUMBER:

SA2015-066A

DATE(S) ISSUED: 06/19/2015

06/22/2015 - Updated

SUBJECT:

Cross App Resource Access Vulnerability in Apple Operating Systems Could Allow Information Disclosure

June 22 - UPDATED SUBJECT

Multiple Cross App Resource Access Vulnerabilities in Apple Operating Systems Could Allow Information Disclosure

OVERVIEW:

A Cross App Resource Access vulnerability has been discovered in Apple Mac OS X and Apple iOS. Mac OS X is an operating system for Apple computers. Apple iOS is an operating system for iPhone, iPod touch, iPad, Apple TV. This vulnerability can be exploited if a user downloads a malicious application onto their system or device. Successful exploitation could result in an attacker gaining access to sensitive information on the device including passwords, documents, or photos stored on the device or by other applications.

June 22 - UPDATED OVERVIEW

Multiple Cross App Resource Access vulnerabilities have been discovered in Apple Mac OS X and Apple iOS.

THREAT INTELLIGENCE:

A full report detailing the vulnerability has been published. At this time there are no reports of this vulnerability being used in the wild.

June 22 - UPDATED - THREAT INTELLIGENCE

A full report detailing these vulnerabilities has been published. At this time there are no reports of these vulnerabilities being used in the wild.

SYSTEMS AFFECTED:

- Apple Mac OS X prior to version 10.10.3
- Apple iOS prior to version 8.3

June 22 - UPDATED SYSTEMS AFFECTED

- Apple Mac OS X version 10.10.3, & 10.10.4 Beta and prior
- Apple iOS version 8.3 and prior

RISK:

Government:

Large and medium government entities: High

Small government entities: High

Businesses:

Large and medium business entities: High

Small business entities: High

Home users: High

TECHNICAL SUMMARY:

A Cross App Resource Access vulnerability has been discovered in OSX and iOS, due to a failure to treat other applications on the device as untrusted. An attacker can craft a malicious application and submit it to the app store as a legitimate application. Once approved, the attacker can entice a victim to download the application, allowing access to data stored on the system as well as data stored by other applications. Based on a sampling of the top 1,612 OSX applications and 200 iOS applications at the time, the researchers reported a vulnerability rate of 88.6% across the App Stores. Successful exploitation could result in an attacker gaining access to sensitive information including the OSX system keychain, iCloud secret token, passwords, and any other data stored or processed by a vulnerable application.

June 22 - UPDATED TECHNICAL SUMMARY

Cross App Resource Access vulnerabilities have been discovered in OSX and iOS.

- 1. An authentication-bypass vulnerability exits because it fails to properly implement the authentication mechanism. Specifically, the issue affects the 'Keychain' service. An attacker can exploit this issue to obtain sensitive information such as authentication tokens, iCloud
- passwords, and user password saved on Google Chrome.
- 2. A security-bypass vulnerability exists because it fails to properly restrict access to the secure container belonging to another app. An attacker can exploit this issue to obtain data from another app.
- 3. An information-disclosure vulnerability exists because it fails to properly restrict user supplied input. Specifically, the issue affects the cross-app Inter-process communication (IPC) channels. An attacker can exploit this issue to obtain sensitive information such as passwords.
- 4. A security vulnerability exists because it allows a malicious app to hijack a scheme. An attacker can exploit this issue to access tokens and other information.

RECOMMENDATIONS:

We recommend the following actions be taken:

- Once a patch is released from Apple perform updates immediately after appropriate testing.
- Remind users not to download applications from un-trusted or unknown sources.

REFERENCES:

Krebs On Security:

http://krebsonsecurity.com/2015/06/critical-flaws-in-apple-samsung-devices/

Original Report:

https://drive.google.com/file/d/0BxxXk1d3yyuZOFlsdkNMSGswSGs/view

June 22 – UPDATED REFERENCES

SecurityFocus:

http://securityfocus.com/bid/75308